

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of controlling drag and vortex induced vibration in a substantially cylindrical element consisting of providing a substantially cylindrical marine element consisting of an ultra-smooth surface about the cylindrical element having a K/D ratio of 1.0×10^{-4} or less where:

K is an average measure surface peak to ~~through~~ trough distance and

D is an effective outside diameter of the cylindrical element.

2. (Currently Amended) A method of controlling drag and vortex induced vibration about a substantially cylindrical marine element consisting of providing an ultra-smooth surface coating about the cylindrical element having a K/D ratio of 1.0×10^{-4} or less where:

K is an average measured surface peak to trough peak distance; and

D is an effective outside diameter of the cylindrical element including the coating.

3. (Currently Amended) A method of controlling drag and vortex induced vibration about a substantially cylindrical marine element consisting of providing an ultra-smooth surface on a substantially cylindrical sleeve about the cylindrical element, the sleeve having a K/D ratio of 1.0×10^{-4} or less where:

K is an average measured surface peak to trough peak distance; and

D is an effective outside diameter of the cylindrical element, including the sleeve.

4. (Currently Amended) A system for controlling drag and vortex induced vibration, consisting of:

a substantially cylindrical marine element having ~~have~~ an ultra-smooth effective surface with a K/D roughness parameter of about 1.0×10^{-4} or less, where:

K is an average measured surface peak to trough peak distance; and

D is an effective outside diameter of the cylindrical element, including the sleeve.

5. (Previously Presented) A system for controlling drag and vortex induced vibration consisting of a substantially cylindrical marine element having an ultra-smooth coating material with a K/D roughness parameter of 1.0×10^{-4} or less where:

K is an average measured surface peak to trough peak distance; and

D is an effective outside diameter of the cylindrical element including the coating.

6. (Previously Presented) A system for controlling drag and vortex induced vibration consisting of a substantially cylindrical marine element having an ultra-smooth substantially cylindrical sleeve surrounding the marine element with a K/D roughness ratio of 1.0×10^{-4} or less where:

K is an average measured surface peak to trough peak distance; and

D is an effective outside diameter of the cylindrical element including the cylindrical sleeve.